Psy 462 Experimental Analysis of Behavior

Spring 2021; Dr. Val Farmer-Dougan

 TEST #2

Answer each of the following questions as completely as you can. You may use your notes, the power points, readings, and your book.  Answers should be approximately ½ to 1 page long. You do not have to cite information (other than researcher/philosopher/theorist name). You may work collaboratively, but please turn in your own answer.  This test is due 2 weeks after it is handed out (in this case, April 4th). You may turn in a hard copy or you may email it to me at [vfdouga@ilstu.edu](mailto:vfdouga@ilstu.edu).

1. One topic that often haunts behaviorists is the lack of a “theoretical approach” by the early behaviorists. Why do you think Skinner and his colleagues were such strong advocates of an inductive rather than a deductive approach- that is, what did it gain them that the traditional deductive approach could not? Do you think that important themes such as biological underpinnings of behavior, the Behavior Economic or matching models or even the disequilibrium models could have emerged using the deductive approach, or was it important that data were first collected using an inductive method? Defend your answer! (No, there is no “right” answer- support YOUR answer with themes from our discussions, the readings and your own knowledge! Really!).
2. Okay, for a nice, broad, comprehensive exam type question (just getting you ready): Just **WHAT** is a reinforcer and a punisher? Be sure to include a discussion that considers reinforcement/punishment from Skinner’s, and Thorndike’s view, as well as the more “modern” theories(disequilibrium, matching, etc.). Oh- and have fun with this one!!!!!
3. Timmy is a small, small boy with big, big behavior problems. He is enrolled in a regular classroom, but has several teachers and therapists working with him during each school day. Timmy displays a wide variety of behaviors, such as headbanging and other self-injurious behaviors. At the same time, Timmy is rarely “in his place” (that is, he runs around the classroom), rarely completes his school work, and basically is a little hellion. However, he is currently on a rich reward system- as long as he hasn’t bitten or hit anyone he comes home with about 50 stickers and 50 pieces of candy. You see, his reinforcement program is such that he receives stickers for "being good" in math, candy for "being good" in language arts, He usually earns all of both stickers and candy. Now, the behavior analyst has been having trouble getting Timmy to pay attention during social skills group lately, so he has implemented a token system where Timmy can earn 100 stickers or 100 pieces of candy for staying in his seat during homeroom, and Timmy gets to choose which he will earn each day. But, now, depending on whether Timmy chooses stickers or candy for homeroom, it is affecting the behavior in math and language arts. Knowing what you do about the matching law (either Herrnstein's version or Baum's version)- what are all these therapists and teachers "doing wrong" (or is it Timmy that simply needs to be “fixed”)? What would you suggest they do differently, and WHY?
4. Behavioral economics appears to be a pretty good description of behavior. Importantly, it tells us that demand for an item may differ depending on whether the demand is elastic or inelastic, and whether the demand occurs in an open and closed economy. So, here is a puzzle for you to solve. I have two hypothetical small children (or two large children, for that matter!) working on a task and they can choose either reward A or reward B. For one child, the two rewards are completely substitutable- Coke versus Pepsi (elastic demand). For the other child, the rewards are complimentary. Pepsi is NOT interchangeable with Coke (inelastic demand). Interestingly, for this child, he appears to need a little Coke AND a little Pepsi, where the other child could care less which she earns. Now, I keep increasing the “price” of the Pepsi reward- requiring each child to engage in more and more work in order to earn this reward. At low Pepsi and low Coke cost, both children choose some Pepsi and some Coke. What happens to each child’s choice of reward (do they keep choosing Pepsi or coke) as the price of Pepsi goes up? Why? Would this choice be affected if the children were allowed Coke and Pepsi outside my study (open economy) vs a closed economy situation? Why?
5. Describe how a matching law theorist, and a behavioral economics theorist explain reinforcers? What do matching law theorists mean by sensitivity to reinforcement (the a or matching parameter) and bias?  What do behavioral economics theorists mean by elasticity of demand and substitutability of commodities? How can using a behavioral economics approach improve upon the matching law explanation of what we know about reinforcement?